



1

SEQUENCE LISTING

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COOPERMAN, LENA
PERETZ, TUVIA
LAZAROVITS, JANETTE

<120> Y1 - ISOLATED MOLECULES COMPRISING EPITOPES
CONTAINING SULFATED MOIETIES, ANTIBODIES TO SUCH
EPITOPES, AND USES THEREOF

<130> 10793/44

<140> 10/032,037

<141> 2001-12-31

<150> 60/258,948

<151> 2000-12-29

<160> 270

<170> PatentIn Ver. 3.3

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<213> Homo sapiens

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Ser Ser Tyr Thr Ser Ser Ser Thr Leu Val
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Ser Ser Tyr Thr Ser Ser Ser Thr Leu Gly
1 5 10

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Gln Ser Tyr Asp Ser Asn Leu Arg Val
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Gln Gln Leu Asn Ser Tyr Pro Thr
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<211> 11

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Asn Ser Arg Asp Ser Ser Gly Phe Gln Leu Val
 1 5 10

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Gln Gln Ala Asn Ser Phe Pro Ile Thr
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<213> Homo sapiens

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Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr
 1 5 10 15

Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser
 20 25 30

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly
 35 40 45

Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser
 50 55 60

Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp
 65 70 75 80

Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val
 85 90 95

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Ala Ala Ala
 100 105 110

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<400> 8
 Met Arg Ala Pro Val Ile
 1 5

<210> 9
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 Pro Trp Asp Asp Val Thr Pro Pro
 1 5

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 Gly Phe Pro Arg Ile Thr Pro Pro Ser Ala Glu Ile
 1 5 10

<210> 11
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 Gly Phe Pro Met Pro
 1 5

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<400> 12
 Gly Phe Pro His Ser Ser Ser Val Ser Arg
 1 5 10

<210> 13
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<400> 13
 Arg Phe Pro Met Arg His Glu Lys Thr Asn Tyr
 1 5 10

<210> 14
 <211> 8
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 Arg Phe Pro Pro Thr Ala Thr Ile
 1 5

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 Thr Gln Arg Arg Asp Leu Gly
 1 5

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<400> 16
 Lys Phe Pro Gly Gly Thr Val Arg Gly Leu Lys
 1 5 10

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 Gly Phe Pro Val Ile Val Glu Glu Arg Gln Ser Thr
 1 5 10

<210> 18
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 Arg Phe Pro Gln Arg Val Asp Asn Arg Val
 1 5 10

<210> 19
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<400> 19
 Thr Gly Gln Ser Ile Lys Arg Ser
 1 5

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 Leu Thr His Pro Tyr Phe
 1 5

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<400> 21
 Leu Arg Pro Pro Glu Ser
 1 5

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<400> 22
 Thr Ser Lys Asn Thr Ser Ser Ser Lys Arg His
 1 5 10

<210> 23
 <211> 12
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 <213> Homo sapiens

<400> 23
 Arg Tyr Tyr Cys Arg Ser Ser Asp Cys Thr Val Ser
 1 5 10

<210> 24
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 <213> Homo sapiens

<400> 24

Phe Arg Arg Met Glu Thr Val Pro Ala Pro
 1 5 10

<210> 25

<211> 277

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<213> Homo sapiens

<400> 25

Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Ala
 1 5 10 15

Ala Gln Pro Ala Met Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 20 25 30

Val Val Arg Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 35 40 45

Phe Thr Phe Asp Asp Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly
 50 55 60

Lys Gly Leu Glu Trp Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr
 65 70 75 80

Gly Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 85 90 95

Ala Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 100 105 110

Thr Ala Val Tyr Tyr Cys Ala Arg Met Arg Ala Pro Val Ile Trp Gly
 115 120 125

Gln Gly Thr Leu Val Thr Val Ser Arg Gly Gly Gly Gly Ser Gly Gly
 130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala
 145 150 155 160

Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp
 165 170 175

Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln
 180 185 190

Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile
 195 200 205

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr
 210 215 220

Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser
 225 230 235 240

Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu
 245 250 255

Thr Val Leu Gly Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp
 260 265 270

Leu Asn Gly Ala Ala
 275

<210> 26

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<212> PRT

<213> Homo sapiens

<400> 26

Met Ala Trp Ala Leu Leu Leu Thr Leu Leu Thr Gln Asp Thr Gly
 1 5 10 15

Ser Trp Ala Asp Ile Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg
 20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

Asp Asp Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60

Glu Trp Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr Gly Tyr Ala
 65 70 75 80

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
 85 90 95

Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110

Tyr Tyr Cys Ala Arg Met Arg Ala Pro Val Ile Trp Gly Gln Gly Thr
 115 120 125

Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
 130 135 140

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly
 145 150 155 160

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
 165 170 175

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
 180 185 190

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
 195 200 205

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser
 210 215 220

Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys Ser Cys Asp Lys Thr
 225 230 235 240

His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser
 245 250 255
 Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
 260 265 270
 Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
 275 280 285
 Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
 290 295 300
 Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
 305 310 315 320
 Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
 325 330 335
 Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
 340 345 350
 Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
 355 360 365
 Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys
 370 375 380
 Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
 385 390 395 400
 Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Ser Pro Val Leu Asp
 405 410 415
 Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
 420 425 430
 Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
 435 440 445
 Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 450 455 460

<210> 27

<211> 233

<212> PRT

<213> Homo sapiens

<400> 27

Met Ala Trp Ala Leu Leu Leu Leu Thr Leu Leu Thr Gln Asp Thr Gly
 1 5 10 15
 Ser Trp Ala Asp Ala Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala
 20 25 30

Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser
 35 40 45
 Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu
 50 55 60
 Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe
 65 70 75 80
 Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala
 85 90 95
 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser
 100 105 110
 Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
 115 120 125
 Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu
 130 135 140
 Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
 145 150 155 160
 Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val
 165 170 175
 Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys
 180 185 190
 Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
 195 200 205
 His Lys Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
 210 215 220
 Lys Thr Val Ala Pro Thr Glu Cys Ser
 225 230

<210> 28
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 28
 Phe Leu Thr Tyr Asn Ser Tyr Glu Val Pro Thr
 1 5 10

<210> 29
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 29

Thr Asn Trp Tyr Leu Arg Pro Leu Asn
 1 5

<210> 30

<211> 98

<212> PRT

<213> Homo sapiens

<400> 30

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30

Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45

Gly Leu Val Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Glu Lys Phe
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Thr

<210> 31

<211> 98

<212> PRT

<213> Homo sapiens

<400> 31

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Asp Tyr
 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Glu Leu Gly Trp Met
 35 40 45

Gly Arg Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Thr Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 32
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 32
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr

<210> 33
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 33
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 20 25 30
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Arg Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Ser Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Val Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 34
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 34
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 20 25 30
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 35
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 35
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 20 25 30
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Trp Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 36
 <211> 98
 <212> PRT
 <213> Homo sapiens

<220>
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<400> 36
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Leu Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 20 25 30
 Tyr Met His Trp Val Xaa Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 37
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 37
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
 20 25 30
 Cys Met His Trp Val Arg Gln Val His Ala Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Leu Val Cys Pro Ser Asp Gly Ser Thr Ser Tyr Ala Gln Lys Phe
 50 55 60
 Gln Ala Arg Val Thr Ile Thr Arg Asp Thr Ser Met Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Val Arg

<210> 38
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 38
 Gln Met Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Thr
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr Ser Ser
 20 25 30
 Ala Val Gln Trp Val Arg Gln Ala Arg Gly Gln Arg Leu Glu Trp Ile
 35 40 45
 Gly Trp Ile Val Val Gly Ser Gly Asn Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Glu Arg Val Thr Ile Thr Arg Asp Met Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Ala

<210> 39
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 39
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr
 20 25 30
 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 40
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 40
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr
 20 25 30
 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Arg Ile Ile Pro Ile Leu Gly Ile Ala Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 41
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 41
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Ala Gly Asn Gly Asn Thr Lys Tyr Ser Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 42

<211> 98
 <212> PRT
 <213> Homo sapiens

<400> 42
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
 35 40 45
 Gly Trp Ser Asn Ala Gly Asn Gly Asn Thr Lys Tyr Ser Gln Glu Phe
 50 55 60
 Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Met Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 43
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 43
 Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Asn Thr Gly Asn Pro Thr Tyr Ala Gln Gly Phe
 50 55 60
 Thr Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Ile Cys Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 44
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 44
 Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Asn Thr Gly Asn Pro Thr Tyr Ala Gln Gly Phe
 50 55 60
 Thr Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 45
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 45
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Met Asn Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 46
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 46
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 47
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 47
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala
 85 90

<210> 48
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 48

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 49

<211> 98

<212> PRT

<213> Homo sapiens

<400> 49

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Asn Ser Tyr
 20 25 30
 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 50

<211> 98

<212> PRT

<213> Homo sapiens

<400> 50

Gln Met Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Thr Gly Ser
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Tyr Arg
 20 25 30
 Tyr Leu His Trp Val Arg Gln Ala Pro Gly Gln Ala Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Thr Pro Phe Asn Gly Asn Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Asp Arg Val Thr Ile Thr Arg Asp Arg Ser Met Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 51

<211> 98

<212> PRT

<213> Homo sapiens

<400> 51

Gln Met Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Thr Gly Ser
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Tyr Arg
 20 25 30
 Tyr Leu His Trp Val Arg Gln Ala Pro Gly Gln Ala Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Thr Pro Phe Asn Gly Asn Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Asp Arg Val Thr Ile Thr Arg Asp Arg Ser Met Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 52

<211> 96

<212> PRT

<213> Homo sapiens

<400> 52

Gln Val Thr Leu Lys Glu Ser Gly Pro Val Leu Val Lys Pro Thr Glu
 1 5 10 15
 Thr Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Asn Ala
 20 25 30
 Arg Met Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
 35 40 45
 Trp Leu Ala His Ile Phe Ser Asn Asp Glu Lys Ser Tyr Ser Thr Ser
 50 55 60
 Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Lys Ser Gln Val
 65 70 75 80
 Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr
 85 90 95

<210> 53

<211> 99

<212> PRT

<213> Homo sapiens

<400> 53

Gln Ile Thr Leu Lys Glu Ser Gly Pro Thr Leu Val Lys Pro Thr Gln
 1 5 10 15
 Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Ser
 20 25 30
 Glu Trp Cys Gly Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu Trp
 35 40 45
 Leu Ala Leu Ile Tyr Trp Asn Asp Asp Lys Arg Tyr Ser Pro Ser Leu
 50 55 60
 Lys Ser Arg Leu Thr Ile Thr Lys Asp Thr Ser Lys Asn Gln Val Val
 65 70 75 80
 Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr Cys
 85 90 95

Ala His Arg

<210> 54

<211> 96

<212> PRT

<213> Homo sapiens

<400> 54

Gln Val Thr Leu Arg Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln
 1 5 10 15
 Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Ser
 20 25 30
 Gly Met Cys Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
 35 40 45
 Trp Leu Ala Leu Ile Asp Trp Asp Asp Asp Lys Tyr Tyr Ser Thr Ser
 50 55 60
 Leu Lys Thr Arg Leu Thr Ile Ser Lys Asp Thr Ser Lys Asn Gln Val
 65 70 75 80
 Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr
 85 90 95

<210> 55

<211> 96

<212> PRT

<213> Homo sapiens

<400> 55

Gln Val Thr Leu Lys Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln
 1 5 10 15
 Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Ser
 20 25 30
 Gly Met Arg Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
 35 40 45
 Trp Leu Ala Arg Ile Asp Trp Asp Asp Asp Lys Phe Tyr Ser Thr Ser
 50 55 60
 Leu Lys Thr Arg Leu Thr Ile Ser Lys Asp Thr Ser Lys Asn Gln Val
 65 70 75 80
 Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr
 85 90 95

<210> 56

<211> 100

<212> PRT

<213> Homo sapiens

<400> 56

Gln Ile Thr Leu Lys Glu Ser Gly Pro Thr Leu Val Lys Pro Thr Gln
 1 5 10 15
 Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Ser
 20 25 30
 Gly Val Gly Val Gly Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
 35 40 45
 Trp Leu Ala Leu Ile Tyr Trp Asn Asp Asp Lys Arg Tyr Ser Pro Ser
 50 55 60
 Leu Lys Ser Arg Leu Thr Ile Thr Lys Asp Thr Ser Lys Asn Gln Val
 65 70 75 80
 Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr
 85 90 95
 Cys Ala His Arg
 100

<210> 57

<211> 100

<212> PRT

<213> Homo sapiens

<400> 57

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp His
 20 25 30
 Tyr Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Arg Thr Arg Asn Lys Ala Asn Ser Tyr Thr Thr Glu Tyr Ala Ala
 50 55 60
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Ser
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Ala Arg
 100

<210> 58

<211> 100

<212> PRT

<213> Homo sapiens

<400> 58

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp His
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Gln Gly Lys Gly Leu Glu Leu Val
 35 40 45
 Gly Leu Ile Arg Asn Lys Ala Asn Ser Tyr Thr Thr Glu Tyr Ala Ala
 50 55 60
 Ser Val Lys Gly Arg Leu Thr Ile Ser Arg Glu Asp Ser Lys Asn Thr
 65 70 75 80
 Leu Tyr Leu Gln Met Ser Ser Leu Lys Thr Glu Asp Leu Ala Val Tyr
 85 90 95
 Tyr Cys Ala Arg
 100

<210> 59

<211> 100

<212> PRT

<213> Homo sapiens

<400> 59

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp His
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Gln Gly Lys Gly Leu Glu Leu Val
 35 40 45
 Gly Leu Ile Arg Asn Lys Ala Asn Ser Tyr Thr Thr Glu Tyr Ala Ala
 50 55 60
 Ser Val Lys Gly Arg Leu Thr Ile Ser Arg Glu Asp Ser Lys Asn Thr
 65 70 75 80
 Leu Tyr Leu Gln Met Ser Ser Leu Lys Thr Glu Asp Leu Ala Val Tyr
 85 90 95
 Tyr Cys Ala Arg
 100

<210> 60

<211> 98

<212> PRT

<213> Homo sapiens

25

<400> 60

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Ala Lys

<210> 61

<211> 98

<212> PRT

<213> Homo sapiens

<400> 61

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30
Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg

<210> 62

<211> 98

<212> PRT

<213> Homo sapiens

<400> 62

Glu Val Gln Leu Val Glu Ser Gly Gly Val Val Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Leu Ile Ser Trp Asp Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
 85 90 95
 Ala Lys

<210> 63

<211> 98

<212> PRT

<213> Homo sapiens

<400> 63

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
 20 25 30
 Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 64

<211> 100

<212> PRT

<213> Homo sapiens

<400> 64

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala
 20 25 30
 Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
 50 55 60
 Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Thr Thr
 100

<210> 65

<211> 98

<212> PRT

<213> Homo sapiens

<400> 65

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Pro Ala Ser Gly Phe Thr Phe Ser Asn His
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Gly Asp Ser Gly Tyr Thr Asn Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Asn Asn Ser Pro Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Val Lys

<210> 66

<211> 98

<212> PRT

<213> Homo sapiens

<400> 66

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn His
 20 25 30
 Tyr Thr Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ser Ser Gly Asn Ser Gly Tyr Thr Asn Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Val Lys

<210> 67

<211> 98

<212> PRT

<213> Homo sapiens

<400> 67

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ser
 20 25 30
 Asp Met Asn Trp Val His Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Gly Val Ser Trp Asn Gly Ser Arg Thr His Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Thr Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Val Arg

<210> 68

<211> 97

<212> PRT

<213> Homo sapiens

<400> 68

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Ile Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg

<210> 69

<211> 97

<212> PRT

<213> Homo sapiens

<400> 69

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Val Ile Tyr Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg

<210> 70

<211> 97

<212> PRT

<213> Homo sapiens

<400> 70

Glu Val Gln Leu Val His Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Tyr Ala Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Arg Ala Glu Asp Met Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg

<210> 71

<211> 97

<212> PRT

<213> Homo sapiens

<400> 71

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Tyr Ala Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Arg Ala Glu Asp Met Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg

<210> 72

<211> 98

<212> PRT

<213> Homo sapiens

<400> 72

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Tyr Val
 35 40 45
 Ser Ala Ile Ser Ser Asn Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Val Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Val Arg

<210> 73

<211> 35

<212> PRT

<213> Homo sapiens

<400> 73

Thr Phe Ser Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
 1 5 10 15
 Gly Leu Glu Tyr Val Ser Ala Ile Ser Ser Asn Gly Gly Ser Thr Tyr
 20 25 30
 Tyr Ala Asp
 35

<210> 74

<211> 98

<212> PRT

<213> Homo sapiens

<400> 74

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

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<210> 75
<211> 98
<212> PRT
<213> Homo sapiens
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<400> 75																
Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg	
1				5					10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr	
			20					25					30			
Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
		35					40					45				
Ala	Val	Ile	Ser	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	Asp	Ser	Val	
	50					55					60					
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr	
65					70					75					80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
				85					90					95		

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<210> 76
<211> 98
<212> PRT
<213> Homo sapiens
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<400> 76
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
  1                               5                10              15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
                20                25              30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35                40              45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
      50                55              60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
  65                70              75              80

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<210> 77
<211> 98
<212> PRT
<213> Homo sapiens
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<210> 78
<211> 97
<212> PRT
<213> Homo sapiens
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<400> 78
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
  1                      5                      10                      15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
      20                      25                      30

Asp Met His Trp Val Arg Gln Ala Thr Gly Lys Gly Leu Glu Trp Val
      35                      40                      45

Ser Ala Ile Gly Thr Ala Gly Asp Thr Tyr Tyr Pro Gly Ser Val Lys
  50                      55                      60

Gly Arg Phe Thr Ile Ser Arg Glu Asn Ala Lys Asn Ser Leu Tyr Leu
  65                      70                      75                      80

Gln Met Asn Ser Leu Arg Ala Gly Asp Thr Ala Val Tyr Tyr Cys Ala
      85                      90                      95

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Arg

<210> 79
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 79
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 80
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 80
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys

<210> 81
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 81
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 82
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 82
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Ser Ser Thr Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 83
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 83
 Glu Asp Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Pro Ser Cys Ala Ala Ser Gly Phe Ala Phe Ser Ser Tyr
 20 25 30
 Val Leu His Trp Val Arg Arg Ala Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45
 Ser Ala Ile Gly Thr Gly Gly Asp Thr Tyr Tyr Ala Asp Ser Val Met
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Ile Ala Glu Asp Met Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg

<210> 84
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 84
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Trp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
 35 40 45
 Ser Arg Ile Asn Ser Asp Gly Ser Ser Thr Thr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 85
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 85
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 86
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 86
 Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Glu Ile Ile His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg

<210> 87
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 87
 Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg

<210> 88
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 88
 Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Val Ser Gly Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Asn Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Ala Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Asn Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Cys Cys Ala
 85 90 95

Arg

<210> 89
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 89
 Gln Leu Gln Leu Gln Glu Ser Gly Ser Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Ile Ser Ser Gly
 20 25 30
 Gly Tyr Ser Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
 35 40 45
 Trp Ile Gly Tyr Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
 50 55 60
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Arg Ser Lys Asn Gln Phe
 65 70 75 80
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95
 Cys Ala Arg

<210> 90
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 90
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly
 20 25 30
 Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
 35 40 45
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
 50 55 60
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
 65 70 75 80
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95
 Cys Ala Arg

<210> 91
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 91
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Ser Gly
 20 25 30
 Ser Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
 35 40 45
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser
 50 55 60
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
 65 70 75 80
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95
 Cys Ala Arg

<210> 92
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 92
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Tyr Ser Ile Ser Ser Gly
 20 25 30
 Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Ile Gly Ser Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 93

<211> 98

<212> PRT

<213> Homo sapiens

<400> 93

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Ser Ser Gly
 20 25 30

Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45

Ile Gly Ser Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu
 50 55 60

Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65 70 75 80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 94

<211> 98

<212> PRT

<213> Homo sapiens

<400> 94

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Asp
 1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Tyr Ser Ile Ser Ser Ser
 20 25 30

Asn Trp Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45

Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu
 50 55 60

Lys Ser Arg Val Thr Met Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65 70 75 80

Leu Lys Leu Ser Ser Val Thr Ala Val Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 95
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 <212> PRT
 <213> Homo sapiens

<400> 95
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Tyr Ser Ile Ser Ser Ser
 20 25 30
 Asn Trp Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Ile Tyr Tyr Asn Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Met Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Val Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 96
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<400> 96
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Val Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30
 Asn Trp Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Ile Gly Glu Ile Tyr His Ser Gly Asn Pro Asn Tyr Asn Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Ile Ser Ile Asp Lys Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 97
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 <212> PRT
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<400> 97
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Val Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30
 Asn Trp Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Ile Gly Glu Ile Tyr His Ser Gly Ser Pro Asn Tyr Asn Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Ile Ser Val Asp Lys Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 98
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<400> 98
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Pro Gly
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30
 Asn Trp Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Ile Gly Glu Ile Tyr His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Ile Ser Val Asp Lys Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Cys Cys
 85 90 95
 Ala Arg

<210> 99
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 <212> PRT
 <213> Homo sapiens

<400> 99
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gly
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30
 Asn Trp Trp Ser Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Ile Gly Glu Ile Tyr His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Ile Ser Val Asp Lys Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 100
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 <212> PRT
 <213> Homo sapiens

<400> 100
 Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30
 Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
 35 40 45
 Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
 50 55 60
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
 65 70 75 80
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95
 Cys Ala Arg

<210> 101
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 101
 Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30
 Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
 35 40 45
 Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
 50 55 60
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn His Phe
 65 70 75 80
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95
 Cys Ala Arg

<210> 102
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 102
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Ala Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Arg Ile Tyr Thr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Asn Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg

<210> 103
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 103
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg

<210> 104
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 104
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Ser Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Met Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg

<210> 105

<211> 97

<212> PRT

<213> Homo sapiens

<400> 105

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Asp
 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr
 20 25 30

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45

Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60

Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg

<210> 106

<211> 98

<212> PRT

<213> Homo sapiens

<400> 106

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95

Ala Arg

<210> 107
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 107
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50 55 60
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Pro Ile Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 108
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 108
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50 55 60
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 109
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 109
 Glu Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Arg Pro Gly Glu
 1 5 10 15
 Ser Leu Arg Ile Ser Cys Lys Thr Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30
 Trp Ile His Trp Val Arg Gln Met Pro Gly Lys Glu Leu Glu Trp Met
 35 40 45
 Gly Ser Ile Tyr Pro Gly Asn Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50 55 60
 Gln Gly His Val Thr Ile Ser Ala Asp Ser Ser Ser Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Ala Ala Met Tyr Tyr Cys
 85 90 95
 Val Arg

<210> 110
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 110
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15
 Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30
 Trp Ile Ser Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Arg Ile Asp Pro Ser Asp Ser Tyr Thr Asn Tyr Ser Pro Ser Phe
 50 55 60
 Gln Gly His Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 111
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 111
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15
 Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30
 Trp Ile Ser Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Arg Ile Asp Pro Ser Asp Ser Tyr Thr Asn Tyr Ser Pro Ser Phe
 50 55 60
 Gln Gly His Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 112
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 112
 Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
 20 25 30
 Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
 35 40 45
 Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Ala
 50 55 60
 Val Ser Val Lys Ser Arg Ile Thr Ile Asn Pro Asp Thr Ser Lys Asn
 65 70 75 80
 Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val
 85 90 95
 Tyr Tyr Cys Ala Arg
 100

<210> 113
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 113
 Arg Lys Leu Gly Ala Ser Val Lys Val Ser Arg Lys Ala Ser Ser Tyr
 1 5 10 15
 Thr Phe Thr Ser Tyr Asp Ile His Cys Val Arg Gln Ala Pro Gly Lys
 20 25 30
 Gly Leu Lys Gly Trp Met Gly Gly Ile Tyr Ser Gly Asn Gly Lys Thr
 35 40 45
 Gly Tyr Ala Gln Lys Phe Gln Arg Val Thr Met Thr Arg Asp Met Ser
 50 55 60
 Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Gln Arg Ser Glu Asp Ile
 65 70 75 80
 Asp Val Tyr Tyr Cys Ala Arg
 85

<210> 114
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 <212> PRT
 <213> Homo sapiens

<400> 114
 Asp Tyr Gly Met Ser
 1 5

<210> 115
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 115
 Gly Ile Asn Trp Asn Gly Gly Ser Thr Gly Tyr Ala Asp Ser Val Lys
 1 5 10 15
 Gly

<210> 116
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 116
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Arg
 1 5 10

<210> 117
<211> 11
<212> PRT
<213> Homo sapiens

<400> 117
Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
1 5 10

<210> 118
<211> 11
<212> PRT
<213> Homo sapiens

<400> 118
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
1 5 10

<210> 119
<211> 8
<212> PRT
<213> Homo sapiens

<400> 119
Gly Lys Gly Leu Glu Trp Val Ser
1 5

<210> 120
<211> 6
<212> PRT
<213> Homo sapiens

<400> 120
Trp Val Arg Gln Ala Pro
1 5

<210> 121
<211> 11
<212> PRT
<213> Homo sapiens

<400> 121
Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp
1 5 10

<210> 122
<211> 7
<212> PRT
<213> Homo sapiens

<400> 122
Ala Val Tyr Tyr Cys Ala Arg
1 5

<210> 123
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 123
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 1 5 10 15
 Gly Gly Gly Ser
 20

<210> 124
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 124
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 125
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 125
 Asn Ser Arg Asp Ser Ser Gly Asn His
 1 5

<210> 126
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 126
 Ala Ala Trp Asp Asp Ser Leu Val
 1 5

<210> 127
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 127
 Met Gln Ser Ile Gln Leu Pro Thr
 1 5

```
<210> 128
<211> 9
<212> PRT
<213> Homo sapiens
```

```
<400> 128
Met Gln Ser Ile Gln Leu Pro Ala Thr
  1             5
```

```
<210> 129
<211> 10
<212> PRT
<213> Homo sapiens
```

```
<400> 129
Ala Ala Trp Asp Asp Gly Leu Ser Leu Val
  1                      5                      10
```

```
<210> 130
<211> 10
<212> PRT
<213> Homo sapiens
```

```
<400> 130
Ala Ala Trp Asp Asp Ser Leu Ser Gly Val
  1                      5                      10
```

```
<210> 131
<211> 11
<212> PRT
<213> Homo sapiens
```

```
<400> 131
Asn Ser Arg Asp Ser Ser Gly Ser Val Arg Val
  1                      5                10
```

```
<210> 132
<211> 9
<212> PRT
<213> Homo sapiens
```

```
<400> 132
Leu Leu Tyr Tyr Gly Gly Ala Tyr Val
  1             5
```

```
<210> 133
<211> 11
<212> PRT
<213> Homo sapiens
```

```
<400> 133
Asn Ser Arg Asp Ser Ser Gly Val Ser Arg Val
  1                      5                10
```

<210> 134
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 134
 Ala Ala Trp Asp Asp Ser Leu Pro Tyr Val
 1 5 10

<210> 135
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 135
 Ala Ala Trp Asp Asp Ser Leu Cys Pro Glu Phe Val
 1 5 10

<210> 136
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 136
 Ala Ala Trp Asp Asp Ser Leu Ala Trp Phe Val
 1 5 10

<210> 137
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 137
 Leu Ala Trp Asp Thr Ser Pro Arg Trp Val
 1 5 10

<210> 138
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 138
 Thr Ala Trp Asp Asp Ser Leu Ala Val Val
 1 5 10

<210> 139
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 139
 Asn Ser Arg Asp Ser Ser Gly Asn His Arg Val
 1 5 10

<210> 140
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 140
 Gln Gln Tyr Gly Ser Ser Gln Arg Thr
 1 5

<210> 141
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 141
 Ala Ala Trp Asp Asp Ser Leu Arg Leu Val
 1 5 10

<210> 142
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 142
 Met Gln Gly Thr His Trp Arg Pro Thr
 1 5

<210> 143
 <211> 9
 <212> PRT
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<400> 143
 Met Gln Gly Lys His Trp Pro Leu Thr
 1 5

<210> 144
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 144
 Ala Ala Trp Asp Asp Ser Leu Gly Phe
 1 5

<210> 145
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 145
 Met Gln Gly Thr His Arg Arg Ala Thr
 1 5

<210> 146
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 146
 Met Gln Ala Leu Gln Thr Pro Leu Thr
 1 5

<210> 147
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 147
 Met Arg Gly Thr His Arg Arg Ala Thr
 1 5

<210> 148
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 148
 Met Gln Gly Thr His Trp His Pro Thr
 1 5

<210> 149
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 149
 Met Gln Ala Leu Gln Ser Pro Thr
 1 5

<210> 150
 <211> 10
 <212> PRT
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<400> 150
 Ala Ala Trp Asp Asp Ser Leu Ala Phe Val
 1 5 10

<210> 151
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 151
 Met Gln Ala Leu Gln Thr Pro Thr
 1 5

<210> 152
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 152
 Gln Gln Ser Tyr Ser Thr Arg Thr
 1 5

<210> 153
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 153
 Met Gln Gly Thr His Trp Pro Phe Thr
 1 5

<210> 154
 <211> 9
 <212> PRT
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<400> 154
 Met Gln Gly Thr His Trp Pro Ala Thr
 1 5

<210> 155
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 155
 Ala Ala Trp Asp Asp Ser Leu Arg Ser Val
 1 5 10

<210> 156
 <211> 9
 <212> PRT
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<400> 156

Ala Ala Trp Asp Asp Ser Leu Leu Val
 1 5

<210> 157

<211> 11

<212> PRT

<213> Homo sapiens

<400> 157

Asp Ser Trp Asp Asn Ser Leu Val Ser Pro Val
 1 5 10

<210> 158

<211> 9

<212> PRT

<213> Homo sapiens

<400> 158

Met Gln Ala Leu Gln Ser Pro Ala Thr
 1 5

<210> 159

<211> 9

<212> PRT

<213> Homo sapiens

<400> 159

Met Gln Ala Leu Gln Thr Pro Val Thr
 1 5

<210> 160

<211> 11

<212> PRT

<213> Homo sapiens

<400> 160

Ala Ala Trp Asp Asp Ser Leu Ser Ala Tyr Val
 1 5 10

<210> 161

<211> 11

<212> PRT

<213> Homo sapiens

<400> 161

Asn Ser Arg Asp Ser Ser Gly Arg Val Asn Val
 1 5 10

<210> 162
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 162
 Met Gln Ala Leu Arg Thr Arg Thr
 1 5

<210> 163
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 163
 Ala Ala Trp Asp Asp Ser Leu Phe Tyr Pro Val
 1 5 10

<210> 164
 <211> 9
 <212> PRT
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<400> 164
 Met Gln Gly Thr His Trp Pro Val Thr
 1 5

<210> 165
 <211> 8
 <212> PRT
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<400> 165
 Met Gln Gly Thr His Trp Arg Thr
 1 5

<210> 166
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 166
 Ala Ala Trp Asp Asp Ser Leu Phe Tyr Val
 1 5 10

<210> 167
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 167
 Met Gln Ser Ile Gln Leu Pro Leu Thr
 1 5

<210> 168
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 168
 Ala Ala Trp Asp Asp Ser Leu Leu Gly Ser Val
 1 5 10

<210> 169
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 169
 Cys Ser Tyr Ala Gly Ser Ser Tyr Val
 1 5

<210> 170
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 170
 Gln Gln Asp Tyr Asn Leu Leu Thr
 1 5

<210> 171
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 171
 Val Leu Tyr Met Gly Ser Gly Ser Ala Val
 1 5 10

<210> 172
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 172
 Met Gln Arg Ile Glu Phe Pro Asn Thr
 1 5

<210> 173
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 173
 Ala Ala Trp Asp Asp Ser Leu Ala Cys Ala Val
 1 5 10

<210> 174
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 174
 Gln Gln Ala Asn Ser Phe Arg Thr
 1 5

<210> 175
 <211> 11
 <212> PRT
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<400> 175
 Ala Ala Trp Asp Asp Ser Leu Ser Arg Pro Val
 1 5 10

<210> 176
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 <212> PRT
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<400> 176
 Ala Ala Trp Asp Asp Ser Leu Tyr Asn Val
 1 5 10

<210> 177
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 177
 Ala Ala Trp Asp Asp Ser Leu Asn Arg Asn Val
 1 5 10

<210> 178
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<400> 178
 Met Gln Val Leu Gln Thr Arg Thr
 1 5

<210> 179
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<400> 179
 Met Gln Ala Leu Gln Thr Arg Thr
 1 5

<210> 180
 <211> 8
 <212> PRT
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<400> 180
 Gln Gln Ser Tyr Ser Thr Arg Met
 1 5

<210> 181
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 181
 Met Gln Ala Leu Gln Thr Leu Thr
 1 5

<210> 182
 <211> 8
 <212> PRT
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<400> 182
 Met Arg Ala Leu Gln Thr Pro Thr
 1 5

<210> 183
 <211> 11
 <212> PRT
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<400> 183
 Ala Ala Trp Asp Asp Ser Leu Pro Gly Tyr Val
 1 5 10

<210> 184
 <211> 10
 <212> PRT
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<400> 184
 Ala Ala Trp Asp Asp Ser Leu Gly Phe Val
 1 5 10

<210> 185
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 185
 Ala Ala Trp Asp Asp Ser Leu Phe Leu Val
 1 5 10

<210> 186
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 186
 Met Gln Ser Ile Gln Leu Arg Thr
 1 5

<210> 187
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 187
 Ala Ala Trp Asp Asp Ser Leu Ser Ile Val
 1 5 10

<210> 188
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 188
 Met Gln Gly Thr His Trp Pro Thr
 1 5

<210> 189
 <211> 8
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<400> 189
 Met Gln Ala Leu His Thr Arg Thr
 1 5

<210> 190
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 190

Asn Ser Arg Asp Ser Ser Gly Ser Val

1 5

<210> 191

<211> 9

<212> PRT

<213> Homo sapiens

<400> 191

Gln Gln Tyr Gly Ser Ser Pro Tyr Thr

1 5

<210> 192

<211> 8

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<213> Homo sapiens

<400> 192

Gln Gln Ser Tyr Ser Thr Arg Thr

1 5

<210> 193

<211> 9

<212> PRT

<213> Homo sapiens

<400> 193

Gln Gln Ala Asn Ser Phe Ala Ala Thr

1 5

<210> 194

<211> 9

<212> PRT

<213> Homo sapiens

<400> 194

Gln Gln Ala Asn Ser Phe Pro Ala Thr

1 5

<210> 195

<211> 10

<212> PRT

<213> Homo sapiens

<400> 195

Val Leu Tyr Met Gly Ser Gly Val Tyr Val

1 5 10

<210> 196
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 196
 Ala Ala Trp Asp Asp Ser Leu Trp Ser Ala Val
 1 5 10

<210> 197
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 197
 Ala Ala Trp Asp Asp Ser Leu Pro Arg Arg Leu Val
 1 5 10

<210> 198
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 198
 Ala Ala Trp Asp Asp Ser Leu Pro Ser Gly Val
 1 5 10

<210> 199
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 199
 Met Gln Ala Leu Gln Thr Leu Thr
 1 5

<210> 200
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 200
 Ala Ala Trp Asp Asp Gly Leu Leu Arg Val
 1 5 10

<210> 201
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 201
 Ala Ala Trp Asp Asp Ser Leu Ala Leu Val
 1 5 10

<210> 202
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 202
 Asn Ser Arg Asp Ser Ser Gly Phe Gln Leu Val
 1 5 10

<210> 203
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 203
 Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala
 1 5 10 15
 Ala Gln Pro Ala Met Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 20 25 30
 Val Val Arg Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 35 40 45
 Phe Thr Phe Asp Asp Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly
 50 55 60
 Lys Gly Leu Glu Trp Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr
 65 70 75 80
 Gly Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 85 90 95
 Ala Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 100 105 110
 Thr Ala Val Tyr Tyr Cys Ala Arg Leu Thr His Pro Tyr Phe Trp Gly
 115 120 125
 Gln Gly Thr Leu Val Thr Val Ser Arg Gly Gly Gly Gly Ser Gly Gly
 130 135 140
 Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala
 145 150 155 160
 Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp
 165 170 175
 Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln
 180 185 190
 Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile
 195 200 205

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr
 210 215 220

Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser
 225 230 235 240

Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu
 245 250 255

Thr Val Leu Gly Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp
 260 265 270

Leu Asn Gly Ala Ala
 275

<210> 204
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 204
 Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala
 1 5 10 15

Ala Gln Pro Ala Met Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 20 25 30

Val Val Arg Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 35 40 45

Phe Thr Phe Asp Asp Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly
 50 55 60

Lys Gly Leu Glu Trp Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr
 65 70 75 80

Gly Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 85 90 95

Ala Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 100 105 110

Thr Ala Val Tyr Tyr Cys Ala Arg Met Arg Ala Pro Val Ile Trp Gly
 115 120 125

Gln Gly Thr Leu Val Thr Val Ser Arg Gly Gly Gly Gly Ser Gly Gly
 130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala
 145 150 155 160

Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp
 165 170 175

Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln
 180 185 190

Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile
 195 200 205

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr
 210 215 220

Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser
 225 230 235 240

Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu
 245 250 255

Thr Val Leu Gly Ala Ala Ala Lys Ala Lys
 260 265

<210> 205
 <211> 1395
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(1392)

<400> 205
 atg gcc tgg gct ctg ctg ctc ctc acc ctc ctc act cag gac aca ggg 48
 Met Ala Trp Ala Leu Leu Leu Thr Leu Leu Thr Gln Asp Thr Gly
 1 5 10 15

tcc tgg gcc gat atc cag ctg gtg gag tct ggg gga ggt gtg gta cgg 96
 Ser Trp Ala Asp Ile Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg
 20 25 30

cct ggg ggg tcc ctg aga ctc tcc tgt gca gcc tct gga ttc acc ttt 144
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

gat gat tat ggc atg agc tgg gtc cgc caa gct cca ggg aag ggg ctg 192
 Asp Asp Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60

gag tgg gtc tct ggt att aat tgg aat ggt ggt agc aca ggt tat gca 240
 Glu Trp Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr Gly Tyr Ala
 65 70 75 80

gac tct gtg aag ggc cga ttc acc atc tct aga gac aac gcc aag aac 288
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
 85 90 95

tcc ctg tat ctg caa atg aac agt ctg aga gcc gag gac acg gcc gtg 336
 Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110

tat tac tgt gca aga atg agg gct cct gtg att tgg ggc caa ggt acc 384
 Tyr Tyr Cys Ala Arg Met Arg Ala Pro Val Ile Trp Gly Gln Gly Thr
 115 120 125

ctg gtc acc gtc tcg agt gct tcc acc aag ggc cca tcg gtc ttc ccc	432
Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro	
130 135 140	
ctg gca ccc tcc tcc aag agc acc tct ggg ggc aca gcg gcc ctg ggc	480
Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly	
145 150 155 160	
tgc ctg gtc aag gac tac ttc ccc gaa ccg gtg acg gtg tcg tgg aac	528
Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn	
165 170 175	
tca ggc gcc ctg acc agc ggc gtg cac acc ttc ccg gct gtc cta cag	576
Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln	
180 185 190	
tcc tca gga ctc tac tcc ctc agc agc gtg gtg acc gtg ccc tcc agc	624
Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser	
195 200 205	
agc ttg ggc acc cag acc tac atc tgc aac gtg aat cac aag ccc agc	672
Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser	
210 215 220	
aac acc aag gtg gac aag aga gtt gag ccc aaa tct tgt gac aaa act	720
Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys Ser Cys Asp Lys Thr	
225 230 235 240	
cac aca tgc cca ccg tgc cca gca cct gaa ctc ctg ggg gga ctg tca	768
His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Leu Ser	
245 250 255	
gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg	816
Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg	
260 265 270	
acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct	864
Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro	
275 280 285	
gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat gcc	912
Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala	
290 295 300	
aag aca aag ccg cgg gag gag cag tac aac agc acg tac cgt gtg gtc	960
Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val	
305 310 315 320	
agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat ggc aag gag tac	1008
Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr	
325 330 335	
aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc atc gag aaa acc	1056
Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr	
340 345 350	

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atc tcc aaa gcc aaa ggg cag ccc cga gaa cca cag gtg tac acc ctg 1104
Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
      355                      360                      365

ccc cca tcc cgg gag gag atg acc aag aac cag gtc agc ctg acc tgc 1152
Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys
      370                      375                      380

ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc 1200
Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
385                      390                      395                      400

aat ggg cag ccg gag aac aac tac aag acc acg tct ccc gtg ctg gac 1248
Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Ser Pro Val Leu Asp
      405                      410                      415

tcc gac ggc tcc ttc ttc ctc tat agc aag ctc acc gtg cac aag agc 1296
Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val His Lys Ser
      420                      425                      430

agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct 1344
Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
      435                      440                      445

ctg cac aac cac tac acg cag aag agc ctc tcc ctg tct ctg ggt aaa 1392
Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
      450                      455                      460

tga 1395

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<210> 206

<211> 464

<212> PRT

<213> Homo sapiens

<400> 206

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Met Ala Trp Ala Leu Leu Leu Leu Thr Leu Leu Thr Gln Asp Thr Gly
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Ser Trp Ala Asp Ile Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg
      20                      25                      30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
      35                      40                      45

Asp Asp Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
      50                      55                      60

Glu Trp Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr Gly Tyr Ala
      65                      70                      75                      80

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
      85                      90                      95

Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
      100                      105                      110

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Tyr	Tyr	Cys	Ala	Arg	Met	Arg	Ala	Pro	Val	Ile	Trp	Gly	Gln	Gly	Thr		
		115					120					125					
Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro		
	130					135					140						
Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly		
	145				150					155					160		
Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn		
			165						170					175			
Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln		
		180						185					190				
Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser		
	195						200					205					
Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser		
	210					215					220						
Asn	Thr	Lys	Val	Asp	Lys	Arg	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr		
	225				230					235					240		
His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Leu	Ser		
			245						250					255			
Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg		
		260						265					270				
Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro		
	275						280					285					
Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala		
	290					295					300						
Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val		
	305				310					315					320		
Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr		
			325						330					335			
Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr		
			340					345					350				
Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu		
	355						360					365					
Pro	Pro	Ser	Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys		
	370					375					380						
Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser		
	385				390					395					400		
Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Ser	Pro	Val	Leu	Asp		
			405						410					415			

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val His Lys Ser
 420 425 430

Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
 435 440 445

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 450 455 460

<210> 207
 <211> 702
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(699)

<400> 207
 atg gcc tgg gct ctg ctg ctc ctc acc ctc ctc act cag gac aca ggg 48
 Met Ala Trp Ala Leu Leu Leu Leu Thr Leu Leu Thr Gln Asp Thr Gly
 1 5 10 15

tcc tgg gcc gat gca gag ctg act cag gac cct gct gtg tct gtg gcc 96
 Ser Trp Ala Asp Ala Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala
 20 25 30

ttg gga cag aca gtc agg atc aca tgc caa gga cac agc ctc aga agc 144
 Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly His Ser Leu Arg Ser
 35 40 45

tat tat gca agc tgg tac cag cag aag cca gga cag gcc cct gta ctt 192
 Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu
 50 55 60

gtc atc tat ggt aaa aac aac cgg ccc tca ggg atc cca gac cga ttc 240
 Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe
 65 70 75 80

tct ggc tcc agc tca gga aac aca gct tcc ttg acc atc act ggg gct 288
 Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala
 85 90 95

cag gcg gaa gat gag gct gac tat tac tgt aac tcc cgg gac agc agt 336
 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser
 100 105 110

ggt aac cat gtg gta ttc ggc gga ggg acc aag ctg acc gtc cta ggt 384
 Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
 115 120 125

cag ccc aag gct gcc ccc tcg gtc act ctg ttc ccg ccc tcc tct gag 432
 Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu
 130 135 140

gag ctt caa gcc aac aag gcc aca ctg gtg tgt ctc ata agt gac ttc 480
 Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
 145 150 155 160

tac ccg gga gcc gtg aca gtg gcc tgg aag gca gat agc agc ccc gtc 528
 Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val
 165 170 175

aag gcg gga gtg gag acc acc aca ccc tcc aaa caa agc aac aac aag 576
 Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys
 180 185 190

tac gcg gcc agc agc tac ctg agc ctg acg cct gag cag tgg aag tcc 624
 Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
 195 200 205

cac aaa agc tac agc tgc cag gtc acg cat gaa ggg agc acc gtg gag 672
 His Lys Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
 210 215 220

aag aca gtg gcc cct aca gaa tgt tca tga 702
 Lys Thr Val Ala Pro Thr Glu Cys Ser
 225 230

<210> 208

<211> 233

<212> PRT

<213> Homo sapiens

<400> 208

Met Ala Trp Ala Leu Leu Leu Leu Thr Leu Leu Thr Gln Asp Thr Gly
 1 5 10 15

Ser Trp Ala Asp Ala Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala
 20 25 30

Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly His Ser Leu Arg Ser
 35 40 45

Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu
 50 55 60

Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe
 65 70 75 80

Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala
 85 90 95

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser
 100 105 110

Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
 115 120 125

Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu
 130 135 140

Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
 145 150 155 160
 Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val
 165 170 175
 Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys
 180 185 190
 Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
 195 200 205
 His Lys Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
 210 215 220
 Lys Thr Val Ala Pro Thr Glu Cys Ser
 225 230

<210> 209
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 209
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Ala Lys Thr Leu Met Arg Gln Tyr Ser Leu Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Arg Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val
 130 135 140
 Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser
 145 150 155 160
 Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala
 165 170 175

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Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro
      180                      185                      190

Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile
      195                      200                      205

Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg
      210                      215                      220

Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr
      225                      230                      235                      240

Val Leu Gly Ala Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
      245                      250                      255

Asn Gly Ala Ala
      260

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<210> 210
<211> 831
<212> DNA
<213> Homo sapiens

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<220>
<221> CDS
<222> (2)..(802)

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<220>
<221> modified_base
<222> (803)..(806)
<223> unknown nucleotide

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    1                      5                      10                      15

tct ggg gga ggc ttg gta cag cct ggg ggg tcc ctg aga ctc tcc tgt 97
Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
    20                      25                      30

gca gcc tct gga ttc acc ttt agc agc tat gcc atg agc tgg gtc cgc 145
Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg
    35                      40                      45

cag gct cca ggg aag ggg ctg gag tgg gtc tca gct att agt ggt agt 193
Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser
    50                      55                      60

ggg ggt agc aca tac tac gca gac tcc gtg aag ggc cgg ttc acc atc 241
Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
    65                      70                      75                      80

tcc aga gac aat tcc aag aac acg ctg tat ctg caa atg aac agc ctg 289
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
    85                      90                      95

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aga gcc gag gac acg gcc gtg tat tac tgt gca aga acg ggg cag agt 337
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Thr Gly Gln Ser
100 105 110

att aag cgt agt tgg ggc caa ggt acc ctg gtc acc gtg tcg aga ggt 385
Ile Lys Arg Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Arg Gly
115 120 125

gga ggc ggt tca ggc gga ggt ggc tct ggc ggt ggc gga tcg tct gag 433
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu
130 135 140

ctg act cag gac cct gct gtg tct gtg gcc ttg gga cag aca gtc agg 481
Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg
145 150 155 160

atc aca tgc caa gga gac agc ctc aga agc tat tat gca agc tgg tac 529
Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr
165 170 175

cag cag aag cca gga cag gcc cct gta ctt gtc atc tat ggt aaa aac 577
Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn
180 185 190

aac cgg ccc tca ggg atc cca gac cga ttc tct ggc tcc agc tca gga 625
Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly
195 200 205

aac aca gct tcc ttg acc atc act ggg gct cag gcg gaa gat gag gct 673
Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala
210 215 220

gac tat tac tgt aac tcc cgg gac agc agt ggt aac cat gtg gta ttc 721
Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe
225 230 235 240

ggc gga ggg acc aag ctg acc gtc cta ggt gcg gcc gca gaa caa aaa 769
Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Ala Ala Ala Glu Gln Lys
245 250 255

ctc atc tca gaa gag gat ctg aat ggg gcc gca nnnnactggt gaatttttta 822
Leu Ile Ser Glu Glu Asp Leu Asn Gly Ala Ala
260 265

agttaacct 831

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<210> 211

<211> 256

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Y1-Biotag sequence

<400> 211

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Met Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg Pro Gly
 1           5           10           15

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp
          20           25           30

Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
      35           40           45

Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr Gly Tyr Ala Asp Ser
      50           55           60

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu
      65           70           75           80

Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr
          85           90           95

Cys Ala Arg Met Arg Ala Pro Val Ile Trp Gly Gln Gly Thr Leu Val
          100           105           110

Thr Val Ser Arg Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
      115           120           125

Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu
      130           135           140

Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr
      145           150           155           160

Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val
          165           170           175

Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
          180           185           190

Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln
      195           200           205

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly
      210           215           220

Asn Asn Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gly
      225           230           235           240

Gly Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu
          245           250           255

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<210> 212

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Y1-cys-kak scFv Sequence

<400> 212

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Met Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg Pro Gly
 1           5           10           15

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp
          20           25           30

Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
          35           40           45

Val Ser Gly Ile Asn Trp Asn Gly Gly Ser Thr Gly Tyr Ala Asp Ser
          50           55           60

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu
          65           70           75           80

Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr
          85           90           95

Cys Ala Arg Met Arg Ala Pro Val Ile Trp Gly Gln Gly Thr Leu Val
          100          105          110

Thr Val Ser Arg Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
          115          120          125

Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu
          130          135          140

Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr
          145          150          155          160

Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val
          165          170          175

Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
          180          185          190

Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln
          195          200          205

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly
          210          215          220

Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gly
          225          230          235          240

Gly Gly Cys Lys Ala Lys
          245

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<210> 213

<211> 267

<212> PRT

<213> Homo sapiens

<400> 213

Leu Leu Leu Ala Ala Gln Pro Ala Met Ala Glu Val Gln Leu Val Glu
 1 5 10 15
 Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
 20 25 30
 Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg
 35 40 45
 Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser
 50 55 60
 Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
 65 70 75 80
 Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
 85 90 95
 Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Thr Gly Gln Ser
 100 105 110
 Ile Lys Arg Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Arg Gly
 115 120 125
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu
 130 135 140
 Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg
 145 150 155 160
 Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr
 165 170 175
 Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn
 180 185 190
 Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly
 195 200 205
 Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala
 210 215 220
 Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe
 225 230 235 240
 Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Ala Ala Ala Glu Gln Lys
 245 250 255
 Leu Ile Ser Glu Glu Asp Leu Asn Gly Ala Ala
 260 265

<210> 214

<211> 7

<212> PRT

<213> Homo sapiens

<400> 214

Tyr Glu Tyr Leu Asp Tyr Asp
1 5

<210> 215

<211> 13

<212> PRT

<213> Homo sapiens

<400> 215

Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp Thr Glu
1 5 10

<210> 216

<211> 43

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: artifical
formula sequence

<220>

<221> REPEAT

<222> (1)..(2)

<223> This region may encompass 0 to 2 residues

<220>

<221> REPEAT

<222> (3)..(4)

<223> Any amino acid except Glycine, Glutamate, Aspartate
or Tyrosine and this region may encompass 0 to 2 residues

<220>

<221> REPEAT

<222> (5)..(7)

<223> This region may encompass 0 to 3 residues

<220>

<221> REPEAT

<222> (8)..(10)

<223> This region may encompass 0 to 3 residues

<220>

<221> REPEAT

<222> (11)..(13)

<223> This region may encompass 1 to 3 residues

<220>

<221> REPEAT

<222> (14)..(5)

<223> Any amino acid except Glycine, Glutamate, Aspartate
or Tyrosine and this region may encompass 0 to 2 residues

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<220>
<221> REPEAT
<222> (16)..(18)
<223> This region may encompass 0 to 3 residues

<220>
<221> REPEAT
<222> (19)..(21)
<223> This region may encompass 0 to 3 residues

<220>
<221> REPEAT
<222> (22)..(24)
<223> This region may encompass 1 to 3 residues

<220>
<221> REPEAT
<222> (25)..(26)
<223> Any amino acid except Glycine, Glutamate, Aspartate
      or Tyrosine and this region may encompass 0 to 2 residues

<220>
<221> REPEAT
<222> (27)..(29)
<223> This region may encompass 0 to 3 residues

<220>
<221> REPEAT
<222> (30)..(32)
<223> This region may encompass 0 to 3 residues

<220>
<221> REPEAT
<222> (33)..(35)
<223> This region may encompass 1 to 3 residues

<220>
<221> REPEAT
<222> (36)..(38)
<223> This region may encompass 0 to 3 residues

<220>
<221> REPEAT
<222> (39)..(41)
<223> This region may encompass 0 to 3 residues

<220>
<221> REPEAT
<222> (42)..(43)
<223> Any amino acid except Glycine, Glutamate, Aspartate
      or Tyrosine and this region may encompass 0 to 2 residues

<400> 216
Gly Gly Xaa Xaa Glu Glu Glu Asp Asp Asp Tyr Tyr Tyr Xaa Xaa Glu
  1              5              10              15
Glu Glu Asp Asp Asp Tyr Tyr Tyr Xaa Xaa Glu Glu Glu Asp Asp Asp
      20              25              30

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Tyr Tyr Tyr Asp Asp Asp Glu Glu Glu Xaa Xaa
 35 40

<210> 217
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 217
 Glu Cys Pro Glu Gly Tyr Ile Leu Asp Asp Gly Phe Ile Cys Thr Asp
 1 5 10 15

Ile Asp Glu

<210> 218
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 218
 Asp Glu Gly Asp Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp Thr
 1 5 10 15

Glu Gly Asp

<210> 219
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 219
 Gly Glu Glu Asp Asp Asp Tyr Leu Asp Leu Glu Glu Asp Asp Asp Tyr
 1 5 10 15

Ile Asp Ile Val Asp
 20

<210> 220
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 220
 Val Arg Pro Glu His Pro Ala Glu Thr Glu Tyr Asp Ser Leu Tyr Pro
 1 5 10 15

Glu Asp Asp Leu
 20

<210> 221
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 221
 Pro Pro Met Glu Glu Asp Tyr Pro Gln Phe Gly Ser Pro
 1 5 10

<210> 222
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 222
 Arg Ile Ser Asp Arg Asp Tyr Met Gly Trp Met Asp Phe
 1 5 10

<210> 223
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 223
 Cys His Cys Ser Thr Cys Tyr Tyr His Lys Ser
 1 5 10

<210> 224
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 224
 Met Glu Ala Asn Glu Asp Tyr Glu Asp Tyr Glu Tyr Asp Glu Leu Pro
 1 5 10 15

Ala Lys

<210> 225
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 225
 Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Thr
 1 5 10 15

Glu

<210> 226
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 226
 Gly Asp Tyr Tyr Glu Asp Ser Tyr Glu Asp Ile Ser Ala Tyr Leu Leu
 1 5 10 15

<210> 227
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 227
 Gly Tyr Tyr Asp Tyr Asp Phe Pro Leu
 1 5

<210> 228
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 228
 tttcatatgg agctgactca ggaccctgct 30

<210> 229
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 229
 tttgaattcc tattttgctt ttgcggc 27

<210> 230
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 230
 Arg Glu Glu Gly Arg Gln His Phe Phe Leu Leu Glu Gly Arg Ser Ser
 1 5 10 15

Tyr Ser

<210> 231
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 231
 Gly Asp Glu Gly Asp Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp
 1 5 10 15

Thr Glu

<210> 232
 <211> 18
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (9)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (11)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (12)
 <223> Sulfated tyrosine

<400> 232
 Gly Asp Glu Gly Asp Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp
 1 5 10 15

Thr Glu

<210> 233
 <211> 13
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (4)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (6)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (7)
 <223> Sulfated tyrosine

<400> 233
 Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp Thr Glu
 1 5 10

<210> 234
 <211> 13
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (9)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (11)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (12)
 <223> Sulfated tyrosine

<400> 234
 Gly Asp Glu Gly Asp Thr Asp Leu Tyr Asp Tyr Tyr Pro
 1 5 10

<210> 235
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 235
 Glu His Pro Ala Glu Thr Glu Tyr Asp Ser Leu Tyr Pro Glu Asp
 1 5 10 15

<210> 236
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 236
 Val Arg Pro Glu His Pro Ala Glu Thr Glu Tyr Glu Ser Leu Tyr Pro
 1 5 10 15

Glu Asp Asp Leu
 20

<210> 237
 <211> 20
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (11)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (15)
 <223> Sulfated tyrosine

<400> 237
 Val Arg Pro Glu His Pro Ala Glu Thr Glu Tyr Glu Ser Leu Tyr Pro
 1 5 10 15

Glu Asp Asp Leu
 20

<210> 238
 <211> 17
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (5)
 <223> Sulfated tyrosine

<400> 238
 Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Thr
 1 5 10 15

Glu

<210> 239
 <211> 17
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (5)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (7)
 <223> Sulfated tyrosine

<400> 239

Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Thr
 1 5 10 15

Glu

<210> 240

<211> 17

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (5)

<223> Sulfated tyrosine

<220>

<221> MOD_RES

<222> (10)

<223> Sulfated tyrosine

<400> 240

Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Thr
 1 5 10 15

Glu

<210> 241

<211> 17

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (7)

<223> Sulfated tyrosine

<400> 241

Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Thr
 1 5 10 15

Glu

<210> 242

<211> 17

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (7)

<223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (10)
 <223> Sulfated tyrosine

<400> 242
 Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Thr
 1 5 10 15

Glu

<210> 243
 <211> 17
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (10)
 <223> Sulfated tyrosine

<400> 243
 Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Thr
 1 5 10 15

Glu

<210> 244
 <211> 18
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (9)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (11)
 <223> Sulfated tyrosine

<220>
 <221> MOD_RES
 <222> (12)
 <223> Sulfated tyrosine

<400> 244
 Gly Asp Glu Gly Asp Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp
 1 5 10 15

Thr Glu

<210> 245
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide tag

<400> 245
 His His His His His His
 1 5

<210> 246
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide tag

<400> 246
 His Thr Thr Pro His His
 1 5

<210> 247
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 GlySer linker

<400> 247
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 248
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 GlySer linker

<400> 248
 Gly Gly Gly Gly Ser
 1 5

<210> 249
 <211> 74
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 249
 tcgacctcat caccatggcc tgggtctctgc tgctcctcac cctcctcact caggacacag 60
 ggtcctgggc cgat 74

<210> 250
 <211> 91
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 250
 gatcgattgc accagctgga tatcggccca ggaccctgtg tcctgagtga ggagggtgag 60
 gaggcagcaga gccagggcca tggatgatgag g 91

<210> 251
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 251
 tttgatatcc agctgggtgga gtctggggga 30

<210> 252
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 252
 gctgacctag gacggtcagc ttggt 25

<210> 253
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 253
 gggatatcca gctgswggag tcgggc 26

<210> 254
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 254
 ggactcgaga cggtgaccag ggtaccttg 29

<210> 255
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 255
 ccgtcctagg tcagcccaag gctgc 25

<210> 256
 <211> 38
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 256
 tttgcggccg ctcatgaaca ttctgtaggg gccactgt 38

<210> 257
 <211> 38
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 257
 accgctcgag tgcytcacc aagggccat csgtcttc 38

<210> 258
 <211> 38
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 258
 tttgcggccg ctcatttacc crgagacagg gagaggct 38

<210> 259
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 259
 aactcgagtg agctgacaca ggaccct 27

<210> 260
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 260
 tttgtcgact catttctttt ttgcggccgc acc 33

<210> 261
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 261
 atgaaatacc tattgcctac gg 22

<210> 262
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 262
 aactcgagac ggtgaccagg gtacc

25

<210> 263
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 263
 tcgagaggtg gaggcggt

18

<210> 264
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

<400> 264
 tcgaaccgcc tccacctc

18

<210> 265
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 265
 Asp Glu Gly Asp Thr Asp Leu Tyr Asp Tyr Tyr Pro
 1 5 10

<210> 266
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 266
 Tyr Asp Tyr Tyr Pro Glu Glu
 1 5

<210> 267
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 267
 Thr Asp Leu Tyr Asp Tyr Tyr Pro
 1 5

<210> 268
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 268
 Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu
 1 5 10

<210> 269
 <211> 7
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)
 <223> Sulfated tyrosine

<400> 269
 Tyr Asp Tyr Tyr Pro Glu Glu
 1 5

<210> 270
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 270
 Gly Asp Glu Gly Asp Thr Asp Leu Tyr Asp Tyr Tyr Pro
 1 5 10